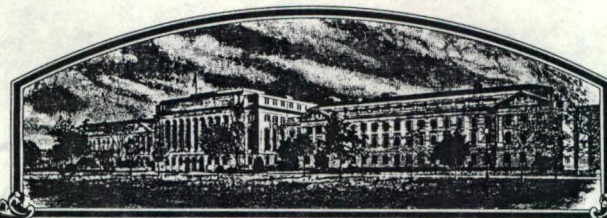


No.

8500189



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Nickerson American Plant Breeders, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

ALFALFA

'Diamond'



Attest:

*Kenneth H. Evans*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D. C. this 28th day of November in the year of our Lord one thousand nine hundred and eighty-six.

*Richard E. Lyng*  
Secretary of Agriculture



1880

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
WAREHOUSE & SEED DIVISION

FORM APPROVED: OMB NO. 0581-0055

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

1. NAME OF APPLICANT(S) Nickerson American Plant Breeders		2. TEMPORARY DESIGNATION NAPB 27		3. VARIETY NAME Diamond	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 5201 Johnson Drive, Shawnee Mission, KS 66205		5. PHONE (Include area code) 913-384-4940		FOR OFFICIAL USE ONLY VPPO NUMBER 8500189	
6. GENUS AND SPECIES NAME Medicago sativa		7. FAMILY NAME (Botanical) Leguminosae		FILING DATE August 12, 1985 -- TIME 11:00 <input checked="" type="checkbox"/> A.M. <input type="checkbox"/> P.M.	
8. KIND NAME Alfalfa		9. DATE OF DETERMINATION September 1982		FEES RECEIVED AMOUNT FOR FILING \$1,800 DATE 8/12/85 AMOUNT FOR CERTIFICATE \$ 200.00 DATE October 24, 1986	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation					
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware				12. DATE OF INCORPORATION 7/14/85	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Dr. Bob Heiner, NAPB, P.O. Box 2955, 5201 Johnson Drive, Shawnee Mission, KS 66201 913-384-4940 Dr. Jim B. Moutray, AgriPro, Rt. 3, Ames, IA 50010 515-292-2432 PHONE (Include area code):					

## 14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED


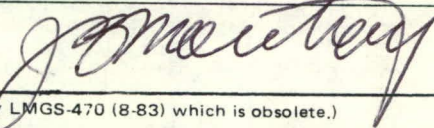
- a. ☒ Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- b. ☒ Exhibit B, Novelty Statement
- c. ☒ Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- d. ☐ Exhibit D, Additional Description of the Variety

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) ☐ Yes (If "Yes," answer items 16 and 17 below) ☒ No16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☒ Yes ☐ No17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? ☒ Foundation ☐ Registered ☒ Certified18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? ☐ Yes (If "Yes," give date) ☒ No19. HAS THE VARIETY BEEN OFFERED FOR SALE OR MARKETED IN THE U.S. OR OTHER COUNTRIES? ☐ Yes (If "Yes," give names of countries and dates) ☒ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT 	DATE 8-5-85
SIGNATURE OF APPLICANT 	DATE 7/31/85

## INSTRUCTIONS

**General:** Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$1,800 fee (\$200 filing fee and \$1,600 examination fee) to U.S. Department of Agriculture, Agricultural Marketing Service, Warehouse and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

### Item

- 9 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 15 If "Yes" is specified (*seed of this variety be sold by variety name only as a class of certified seed*) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 16 See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



## EXHIBIT A

## Origin and Breeding History of the Variety

## 'Diamond'

'Diamond' is a 113 clone intermediate nondormant synthetic variety selected primarily from advanced populations of 'Baron' (100 clones) which had undergone additional selection for resistance to anthracnose and blue alfalfa aphid. Five clones trace to 'Granada' and eight to Cage 1017 which consists of 'WL-514', 50%, 'Cuf- 101', 40% and 'WL-512', 10%. Final selections were made from space plant selection nurseries near Earlimart, California (73 clones) and Carlsbad, New Mexico (40 clones).

Breeder seed was produced under field isolation near Nampa, Idaho.

During seed multiplication, no variants beyond the limits defined under Exhibit C have been found, and multiplication procedures will ensure that seed being sold as 'Diamond' will not be shifted in characteristics beyond presently acceptable limits for alfalfa varieties.

It is also confirmed that 'Diamond' meets presently acceptable levels of uniformity for alfalfa varieties.

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EXHIBIT B

Novelty Statement

8500189

'Diamond'

'Diamond' most closely resembles the variety 'Baron'. 'Diamond' differs from Baron by having a significantly higher level of resistance to anthracnose and Fusarium wilt.

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U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, MEAT, GRAIN & SEED DIVISION  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MARYLAND 20705OBJECTIVE DESCRIPTION OF VARIETY  
ALFALFA (*Medicago sativa* sensu Gunn et al.)

NAME OF APPLICANT(S) Nickerson American Plant Breeders	TEMPORARY DESIGNATION NAPB 27	VARIETY NAME Diamond
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) 5201 Johnson Drive Shawnee Mission, KS 66205		FOR OFFICIAL USE ONLY PVPO NUMBER 8500189

PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place numbers in the boxes to designate the expressions which are characteristic of the commercial generations of the application variety. Data for quantitative plant characters should be based on a minimum of 100 plants. Include leading zeros when necessary (e.g., 089) for quantitative data. Comparative data should be determined from varieties entered in the same trial. Plant color may be precisely designated by using any recognized color chart, e.g., The Munsell Plant Tissue Color Charts.

## 1. WINTERHARDINESS:

3 CLASS:

- |  |                                      |
|--|--------------------------------------|
| 1 = Very Non-Winterhardy (CUF 101)           | 2 = Non-Winterhardy (Moapa 69)       |
| 3 = Intermediately Non-Winterhardy (Mesilla) | 4 = Semi-Winterhardy (Lahontan)      |
| 5 = (Du Puits)                               | 6 = Moderately Winterhardy (Saranac) |
| 7 = (Ranger)                                 | 8 = Winterhardy (Vernal)             |
| 9 = Extremely Winterhardy (Norseman)         |                                      |

TEST LOCATION: Visalia, California & Ames, Iowa

## 2. FALL DORMANCY:

## FALL DORMANCY (DETERMINED FROM SPACED PLANTINGS)

TESTING INSTITUTION AND LOCATION	DATE OF LAST CUT	DATE REGROWTH SCORED	REGROWTH SCORE OR AVERAGE HEIGHT				LSD .05
			APPLICATION VARIETY	CHECK VARIETIES*			
				African	DuPuits	Saranac	
Univ. of Minnesota St. Paul, MN	9-9-83	10-12-83	4.38	3.21	5.14	6.37	0.61

\* CUF 101, Moapa 69, Mesilla, Lahontan, Du Puits, Saranac, Ranger, Vernal, or Norseman as appropriate.

Specify scoring system used: Scored 0-9; 0=18" or higher, 1=16"-18", 2=14"-16", 3=12"-14", 4=10"-12", 5=8"-10", 6=6"-8", 7=4"-6", 8=2"-4", 9=0"-2".

3 Fall Growth Habit (Determined from Fall Dormancy Trials)

- |                            |                          |                            |
|----------------------------|--------------------------|----------------------------|
| 1 = Erect (CUF 101)        | 3 = Semierect (Mesilla)  | 5 = Intermediate (Saranac) |
| 7 = Semidecumbent (Vernal) | 9 = Decumbent (Norseman) |                            |

## 3. RECOVERY AFTER FIRST SPRING CUT (In Southwest, first cut after March 21):

2

- |                          |                    |                           |                   |
|--------------------------|--------------------|---------------------------|-------------------|
| 1 = Very Fast (CUF 101)  | 3 = Fast (Saranac) | 5 = Intermediate (Ranger) | 7 = Slow (Vernal) |
| 9 = Very Slow (Norseman) |                    |                           |                   |

TEST LOCATION: Visalia, California

## 4. AREAS OF ADAPTATION IN U.S. (Where tested and proven adapted):

4

Primary Area of Adaptation

3

Other Areas of Adaptation

- |  |                               |               |
|--|-------------------------------|---------------|
| 1 = North Central                        | 2 = East Central              | 3 = Southeast |
| 5 = Moderately Winterhardy Intermountain | 6 = Winterhardy Intermountain |               |
| 8 = Other (Specify) _____                |                               |               |

- |                  |                  |
|------------------|------------------|
| 4 = Southwest    | 5 = Great Plains |
| 7 = Great Plains |                  |



## 5. FLOWERING DATE (When 10% of plants possess open flowers at time of first spring cut):

Days Earlier Than

Same As

2

1 = CUF 101

2 = Mesilla

3 = Saranac

4 = Vernal

5 = Norseman

Days Later Than

TEST LOCATION: Visalia, California

## 10. B. INSECT RESISTANCE (Continued):

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT SEEDLING SURVIVAL	NUMBER OF SEEDLINGS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Blue Alfalfa Aphid ( <i>Acyrtosiphon kondoi</i> )	Application	2	29.55	over 250		LSD.05	NAPB 1983 Ames, IA greenhouse
	CUF 101 (R)		25.10	"		% Res. 8.31	
	PA-1 (S)		2.20	"			
	SCORING SYSTEM: Plants scored on a scale of 1-5, where 1=tallest and considered resistant, 5=dead plant						
Pea Aphid ( <i>Acyrtosiphon pisum</i> )	Application	2	81.7	over 250		LSD.05	Dr. Merv Neilson reitred U of Ariz. 1983 Greenhouse
	<del>Kenze (R)</del> PA-1		81.0	"		% res.	
	<del>Ranger (S)</del> Caliverde		0.8	"		10.3	
	SCORING SYSTEM: % seedling survival = % resistant						
Spotted Alfalfa Aphid ( <i>Therioaphis maculata</i> )  Biotype, if known:  Biotype H	Application	2	90.7	over 250		LSD.05	Dr. Merv Neilson retired U. ov Ariz. 1983 greenhouse
	<del>Kenze (R)</del> MSTT		75.2	over 250		% res.	
	<del>Ranger (S)</del> Caliverde		0.2	over 250		10.2	
	SCORING SYSTEM: % seedling survival = % resistance						

INSECT	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Potato Leafhopper Yellowing ( <i>Empoasca fabae</i> )	Application	2	12.53	over 200	3.82	0.43	AgriPro Ames, IA
	MSA-CW3An3 (R)		71.01	over 200	1.99		
	Ranger (S)		3.30	over 200	4.58		
	SCORING SYSTEM: Scores of 1 & 2 (on a scale of 1 where 1 = no yellowing and 9 = 100% yellowing) considered resistant. #168/5/86						
Other (Specify)	Application						
	(R)						
	(S)						
SCORING SYSTEM:							

## C. NEMATODE RESISTANCE:

NEMATODE	VARIETY	SYN. GEN. TESTED	PERCENT RESISTANT PLANTS	NUMBER OF PLANTS TESTED	ASI	ASI LSD .05	INSTITUTION, YEAR, LOCATION, FIELD OR LABORATORY
Northern Root Knot ( <i>Meloidogyne hapla</i> )	Application						
	Nev. Syn. XX (R)						
	Lahontan (S)						
	SCORING SYSTEM:						

Added 7-25-86, AB

STEM NEMATODE RESISTANCE OF  
DIAMOND ALFALFA (6-83)\*

VARIETY	% RESIS. PLANTS	ASI
DIAMOND	13.2	4.08
BARON	6.4	4.33
APpALACHEE (RES. CK.)	69.6	1.78
RANGER (SUS. CK.)	0.0	4.31
LSD (0.05)	20.2	NOT CALCULATED
C.V.%	99.3	NOT CALCULATED

\*CONDUCTED BY AGRIPRO AT NAMPA, IDAHO



Added 2/20/86

Exhibit E

Statement of ownership of the alfalfa variety

'Diamond'

Nickerson American Plant Breeders Incorporated is the applicant for protection in this case being;

(A) The incorporated business (registered in Delaware) for and within which regular employees have bred and named this variety.

(B) The proprietary owner and intending commercial user of this variety.

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U.S. DEPARTMENT



OF AGRICULTURE

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BILL OF SALE AND ASSIGNMENT

KNOW ALL MEN BY THESE PRESENTS that AGRIPRO BIOSCIENCES INC., a Delaware corporation (hereinafter referred to as "Seller"), pursuant to that certain Asset Purchase Agreement of even date herewith by and between Seller and AGR ACQUISITION CORPORATION, a Delaware corporation (hereinafter referred to as "Buyer") and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby grant, bargain, sell, assign, convey and deliver unto Buyer, all of Seller's right, title and interest in and to the plant varieties owned/registered by Seller and more particularly set forth on Exhibit A attached hereto for which PVP Certificates have been issued by or may be pending before the U. S. Department of Agriculture.

TO HAVE AND TO HOLD UNTO PURCHASER, its successors and assigns forever.

IN WITNESS WHEREOF, Seller has executed this Bill of Sale and Assignment as of the 30th day of June, 1994.

AGRIPRO BIOSCIENCES INC.

BY: W.A. Zama  
Title: President

STATE OF KANSAS, COUNTY OF JOHNSON

Before me, the undersigned, a Notary Public of the State and County aforesaid, personally appeared W.A. ZAMA with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence) and who, upon oath, acknowledged himself to be the PRESIDENT of Agripro Biosciences Inc., the within named bargainor, a corporation, and that he as such PRESIDENT, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as PRESIDENT.

WITNESS my hand and Notarial Seal at office the day and year above written.

Alma M. Weaver  
Notary Public

My Commission Expires:

June 22, 1998

ALMA M. WEAVER  
NOTARY PUBLIC  
STATE OF KANSAS

My Appt. Exp. June 22, 1998



Office of the Secretary of State

---

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "AGR ACQUISITION CORPORATION", CHANGING ITS NAME FROM "AGR ACQUISITION CORPORATION" TO "AGRIPRO SEEDS, INC.", FILED IN THIS OFFICE ON THE THIRTIETH DAY OF JUNE, A.D. 1994, AT 4:30 O'CLOCK P.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.



*Edward J. Freel*

---

SECRETARY OF STATE  
AUTHENTICATION:

7169071

DATE:

07-01-94

2394087 8100

944121584



06/30/94 14:25 0913 384 0208

ABI SHAWNEE MSN

002/002

CERTIFICATE OF AMENDMENT  
OF  
CERTIFICATE OF INCORPORATION  
OF  
AGR ACQUISITION CORPORATION

AGR Acquisition Corporation, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware,

DOES HEREBY CERTIFY:

FIRST: that the Board of Directors of said corporation, by the unanimous written consent of its members filed with the minutes of the Board, adopted a resolution proposing and declaring advisable the following amendment to the Certificate of Incorporation of said corporation:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "ARTICLE I" so that, as amended, said Article shall be and read as follows:

"ARTICLE I

Name

The name of the corporation (hereinafter called the 'Corporation') is Agripro Seeds, Inc."

SECOND: That in lieu of a meeting and vote of stockholders, the sole shareholder of the corporation has given unanimous written consent to said amendment in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware.

THIRD: That the aforesaid amendment was duly adopted in accordance with the applicable provisions of Sections 242 and 228 of the General Corporation Law of the State of Delaware.

FOURTH: That the capital of said corporation shall not be reduced under or by reason of said amendment.

IN WITNESS WHEREOF, said AGR Acquisition Corporation has caused this certificate to be signed by Gary T. Hancock, its President, and attested by Ann Steelman, its Secretary, this 30<sup>th</sup> day of June, 1994.

AGR ACQUISITION CORPORATION

BY:

Gary T. Hancock  
Gary T. Hancock, President

ATTEST:

BY:

Ann Steelman  
Ann Steelman, Secretary

